

### **Abstract of the disclosure**

The invention relates to the detection of a biological entity in a sample. More particularly, the invention relates to detection of specific pathogens from a possible presence of hundreds to thousands of distinct biological species. The invention provides new assays that can detect the presence of one or more biological entity in a sample out of a possible number of hundreds to thousands of distinct biological species. The method according to the invention for detecting a biological entity in a sample comprises randomly amplifying nucleic acids in the sample to produce labeled nucleic acids;

5    hybridizing the labeled nucleic acids to an array of predetermined nucleic acids; and

10   detecting the labeled nucleic acids that have hybridized to the array.